

REMARKS

Claims 20-34 and 36-52 are pending with claims 45-52 being added and claims 21, 22, 24-29, 31, 33, 34, 36, 37, 39, 40, and 42-44 being withdrawn.

Claim Rejections Under 35 U.S.C. §112, first paragraph

Claims 20, 23, 30, 32, 38 and 41 stand rejected as allegedly containing subject matter not described in the specification. Applicants have amended claims 20 and 41 as suggested by the Examiner to obviate these rejections. However, these amendments should not be construed as an acquiescence to these rejections nor do these amendments narrow the scope of the claims because these amendments merely make explicit what is inherent.

Claim Rejections Under 35 U.S.C. §103

Claims 20, 23, 30, 32, 38 and 41 stand rejected as being allegedly unpatentable over U.S. Pat. No. 5,395,881 (Spelthann). Applicants traverse these rejections, at least for the reasons outlined in their paper filed June 20, 2002. Applicants incorporate these remarks by reference for the sake of efficiency.

Additionally, the Action mailed February 20, 2002, alleged that Spelthann discloses a component (2)(a) [a carboxylic acid-functional polar ethylene-carbon monoxide copolymer] corresponding to (C) [a copolymer made from unsaturated carboxylic acid].

Spelthann discloses (2) a polar thermoplastic polymer component comprising:

- (a) 70-99.9% by weight of a polar ethylene copolymer consisting essentially of
 - (i) 30-80% by weight of ethylene;
 - (ii) 5-60% by weight of at least one copolymerizable, ethylenically unsaturated organic compound; and
 - (iii) 3-30% by weight of carbon monoxide.

Column 1, lines 36-44.

With respect to the polar thermoplastic polymer component, Spelthann discloses:

These polar ethylene copolymers preferably consist essentially of ethylene, carbon monoxide and one or more termonomers which are chlorine-free and are copolymerizable ethylenically unsaturated organic compounds. Such termonomers are selected from the class consisting of non-chlorine containing **unsaturated mono- and dicarboxylic acids** of 3-20 carbon atoms, **esters** of

such unsaturated mono- or dicarboxylic acids, **vinyl esters** of saturated carboxylic acids wherein the acid group has 1-18 carbon atoms, **vinyl alkyl ethers** wherein the alkyl group has 1-18 carbon atoms, **acrylonitrile**, **methacrylonitrile**, **copolymerizable unsaturated hydrocarbons** such as alpha-olefins of 3-12 carbon atoms, **ring compounds** such as norbornene and **vinyl aromatic** compounds.

Column 4, lines 23 – 37, emphasis added. Spelthann further discloses that more preferably vinyl acetate, an alkyl (1-8 carbons) acrylate, or alkyl methacrylate (particularly n butyl acrylate) is the termonomer (column 4, lines 44-47), and exemplifies terpolymers having n-butylacrylate [*sic*] as one of the monomers (column 5, lines 62-63). The fact that a claimed product might be found within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some direction or reason for making the selection. See *Ex parte Koon*, 132 U.S.P.Q. 359 (Pat. Bd. of App. 1962) and *In re Baird*, 29 U.S.P.Q. 2d 1550 (CAFC 1994). Spelthann fails to provide any blazemarks or guideposts for one of skill in the art to pick a copolymer made from an unsaturated carboxylic acid out of the countless other compounds, such as esters, vinyl esters, vinyl alkyl ethers, acrylonitrile, methacrylonitrile, ring compounds, and vinyl aromatic compounds, that can be used instead. Furthermore, Spelthann fails to prefer or exemplify an unsaturated mono- and dicarboxylic acid. Rather, Spelthann discloses preferences of vinyl acetate, alkyl acrylate, and alkyl methacrylate, and exemplifies n-butylacrylate. Consequently, Applicants respectfully submit that these rejections should be withdrawn.

Even assuming Spelthann provides sufficient blazemarks and guideposts to render component C in claim 20 obvious, it cannot render claims 50 and 52 obvious. Referring to column 1, lines 24-52, Spelthann discloses 70 – 99.9% by weight of component (2)(a) [allegedly corresponding to Applicants' component C] with respect to the polar thermoplastic polymer, which comprises 90 - 10% by weight of the blend. Thus, component (2)(a) as an amount of the blend ranges from 7 – 90% by weight ($7\% = 70\% * 0.1$ and $90\% = 99.9\% * 0.9$). Similarly, Spelthann discloses 0.1 – 10% by weight of component (1)(b) [allegedly corresponding to Applicants' component B] with respect to the thermoplastic polymer component, which comprises 10 – 90% by weight of the blend. Thus, component (1)(b) as an amount of the blend ranges from $0.01\% = 0.1\% * 0.1$ and $9\% = 10\% * 0.9$). Consequently, the

weight ratio of (2)(a)/(1)(b) is about 0.78 [(7%/9%) – 9000 [90%/0.01%].

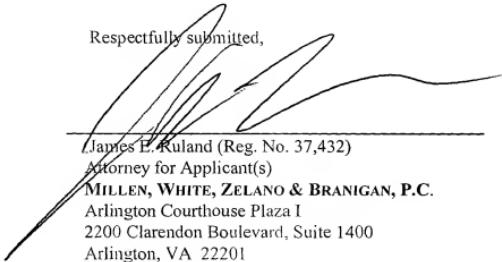
However, similarly as above, Spelthann fails to provide sufficient blazemarks or guideposts to render a weight ratio of (C)/(B) of 0.2 – 0.8, or much less 0.2 – 0.5 obvious (relevant to, respectively, claims 50 and 52). Rather, Spelthann exemplifies a weight ratio of (2)(a)/(1)(b) of 4 – 6. See Examples 1-4 and 5-6 in Table I at columns 5-6. Consequently, this further demonstrates the nonobviousness of the present invention as defined by claims 50 and 52.

What is more, the present invention exhibits significant and unexpected results. Referring to Table I at page 9 of the present specification, compositions E – G containing LUCALENE 3110 as component C exhibit excellent appearance while comparative example H not containing LUCALENE 3110 but rather a crosslinking accelerator of dimethyltallowamine (DMS) is unable to form granules and its MFI is not measurable. Consequently, these results further demonstrate the patentability of the present invention.

In view of the above remarks, favorable reconsideration is courteously requested. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned, "Version With Markings Showing Changes Made". If there are any remaining issues which can be expedited by a telephone conference, the Examiner is courteously invited to telephone Counsel at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response, including extra claim fees and a 1-month petition and extension of time of \$110, or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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Version With Markings Showing Changes Made

20. (Twice Amended) A thermoplastic composition comprising a thermoplastic polymer, having incorporated therein a crosslinked phase from a reaction of:

- (A) a copolymer made from an unsaturated epoxide or a polyolefin grafted with an unsaturated epoxide ~~and having 2 epoxide functional groups,~~
- (B) a copolymer made from ethylene and an unsaturated carboxylic acid anhydride, and
- (C) a copolymer made from an unsaturated carboxylic acid, or an α,ω -aminocarboxylic acid.

41. (Amended) A thermoplastic composition comprising a thermoplastic polymer, having incorporated therein a crosslinked phase from a reaction of:

- (A) a copolymer of an unsaturated epoxide or a polyolefin grafted with an unsaturated epoxide ~~and having 2 epoxide functional groups,~~
- (B) a copolymer of ethylene and an unsaturated carboxylic acid anhydride, and
- (C) a copolymer of an unsaturated carboxylic acid, or an α,ω -aminocarboxylic acid.